

3       chopped fibres in the range of from 95:5 % to 5:95 % by weight of the mixture  
4       respectively.

1           5.       (Amended) A substrate according to claim 4, wherein the  
2       amorphous silica fibres comprise a mixture of both microfibres and chopped fibres  
3       in the range of from 70:30% to 30:70% by weight of the mixture respectively.

1           6.       (Amended) A substrate according to [any preceding] claim 1,  
2       wherein the fibres have a diameter in the range of from 0.1 $\mu$ m to 50 $\mu$ m.

1           7.       (Amended) A substrate according to claim 6, wherein the  
2       fibres have a diameter in the range of 0.4 $\mu$ m to 9 $\mu$ m.

1           8.       (Amended) A substrate according to [any preceding] claim 1,  
2       wherein the binder comprises a solution or dispersion of ion-exchange polymeric  
3       materials, non-ion-conducting polymers, or inorganic materials or mixtures thereof.

1           9.       (Amended) A substrate according to [any preceding] claim 1  
2       for use in the preparation of a composite membrane.

1           10.      (Amended) A composite membrane comprising a porous  
2       substrate of fibres and at least one ion-conducting polymer, characterised in that the  
3       substrate [is one according to any preceding claim, which] comprises a porous  
4       matrix of mixed amorphous silica fibres bound with a binder.

1           11.      (Amended) A composite membrane according to claim 10,  
2       which when [tested by the method described herein in the Examples, results in]  
3       dried then boiled in water undergoes less than or equal to about  $\pm 9\%$  change in the  
4       area.

1           12.      (Amended) A composite membrane according to claim 10,  
2       [or claim 11] wherein the total thickness of the membrane is less than 200 $\mu$ m.

1           13.      (Amended) A composite membrane according to [any one of  
2       claims] claim 10 [to 12] for use in a fuel cell.

1           14. (Amended) A process for the manufacture of a substrate  
2 [according to any one of claims 1 to 9], [which process comprises] comprising the  
3 steps of

- 4           (a) dispersing [the] mixed amorphous silica fibres in water to  
5 form a slurry;  
6           (b) depositing the slurry onto a mesh bed to form a network;  
7           (c) drying and compacting the fibre network; and  
8           (d) applying, before or after step (c), a dispersion of binder.

1           15. (Amended) A process for the manufacture of a membrane  
2 [according to any one of claims 10 to 13], [which process comprises] comprising  
3 the steps of

- 4           (i) forming a porous substrate [of, preferably randomly  
5 orientated individual mixed amorphous silica fibres bound  
6 with a binder by a process] according to claim 14; and  
7 thereafter,  
8           (ii) impregnating the porous substrate with a polymeric material  
9 to produce a membrane.

1           17. (Amended) A membrane electrode assembly comprising [a  
2 substrate according to any one of claim 1 to 9 and/or] a composite membrane  
3 according to [any one of claims] claim 10 [to 13].

1           18. (Amended) A fuel cell comprising [a substrate according to  
2 any one of claim 1 to 9 and/or] a composite membrane according to [any one of  
3 claims] claim 10 [to 13].

Claim 19 has been added.